# NISTTech

## High-Tc Superconductor Contact Unit with Low Interface Resistivity

## Abstract

A high-$T_C$ superconductor contact unit having low interface resistivity is disclosed, as is a method for making the unit. An inert metal is deposited on the surface of the superconductor, which surface is preferably non-degraded, to form a unit with the surface of the superconductor, and where temperatures as high as 500°C to 700°C can be tolerated, the unit is oxygen annealed to establish a still lower surface resistivity between the surface of the high-$T_C$ superconductor and the inert metal, including a low surface resistivity of about $10^{-10}$ Ω-$cm^2$ at high-$T_C$ superconductor operating temperatures. The superconductor is a metal-oxide superconductor, and may be rare earth, thallium, or bismuth based.

## Inventors

- Blankenship, Betty
- Ekin, John W.
- Panson, Armand

## Related Items

- Article: Strain Has Major Effect on High-Temp Superconductors

## References

- U.S. Patent # 5,179,071
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## Status of Availability

This invention is available for licensing.

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